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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,576	07/27/2001	Noriko Yagi	1403-0214P	8192

2292 7590 12/23/2004  
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EXAMINER

WYROZEBSKI LEE, KATARZYNA I

ART UNIT PAPER NUMBER

1714

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/915,576

**Applicant(s)**

YAGI ET AL.

**Examiner**

Katarzyna Wyrozebski

**Art Unit**

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,4 and 6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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In view of applicant's amendment and request for continuing examination following first action is necessitated. The examiner acknowledged request for suspension for two months, which is now expired. The examiner also regrets an unintentional delay in sending the first office action. The rejections of record as requested by the applicants have been carefully reviewed and it is examiner's position that present claims are not allowable over the prior art of record. If the applicants feel that the interview may bring some resolution to the prosecution of the application they are welcome to discuss this application further. Claims 2 and 5 are cancelled, claims 1,3,4 and 6 are pending.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, 4, 6 are rejected under 35 U.S.C. 102(e) as being anticipated by STUHLBREHER (US 6,080,809) or its equivalent EP 894,819.

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The prior art of Stuhldreher discloses composition for tread of a passenger tire. The composition according to Table I comprises:

Solution SBR	90.75 with (SBR 75 pbw)
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Cis BR	25 pbw
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N110 carbon black	41 pbw
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Silica	30 pbw
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Clay	10 pbw
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Silane coupling agent	6 pbw
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From the above information, it is clear that the amount of clay and silica is more than 30 pbw and the amount of carbon black, silica and clay is less than 100 pbw.

The properties of the components according to the specification are as follows: Clay has median particle size of from about 0.2 microns, which includes small particles size of 0.5-10 microns (col. 2, lines 16-18). Preferred silane coupling agent is Si69 (col. 2, lines 25-26). Silica has  $N_2SA$  of 190-220  $m^2/g$  (col. 2, lines 35-36). Although the nitrogen absorption of N110 is not specifically described in the prior art of Stuhldreher, one of ordinary skill in the art with knowledge of reinforcing carbon blacks would know that it is approximately 125  $m^2/g$  either from other documents cited in this office action or from website [www.stochem.com](http://www.stochem.com) (courtesy copy was provided with the first office action on the merits dated 6/6/2003).

In the light of the above disclosure, the prior art of Stuhldreher anticipates requirements of claims rejected above.

*Claim Rejections - 35 USC § 103*

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 3, 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over STUHLREHER (US 6,080,809) in view of FUKUMOTO (US 5,591,794).

In the event the applicants overcome 102 rejection of record, following 103 rejection is stated.

The discussion of the disclosure of the prior art of STUHLREHER from paragraph 2 of this office action is incorporated here by reference.

The difference between the present invention and the disclosure of the prior art of STUHLREHER is specific recitation of particle size of the clay.

With respect to the above difference, the prior art of FUKUMOTO teaches that the clay component that is utilized in making tire treads has particle size of 1 micron (col. 2, lines 42-45) since it has better reinforcing properties.

Use of clay component having particle size of 1 micron provides composition-having clay with good reinforcing properties.

In the light of the above disclosure it would have been obvious to one having ordinary skill in the art at the time of the instant invention, it would have been obvious to one having ordinary skill in the art at the time of the instant invention to utilize clay of FUKUMOTO in the composition of STUHLREHER and thereby obtain the claimed invention. Using clay having

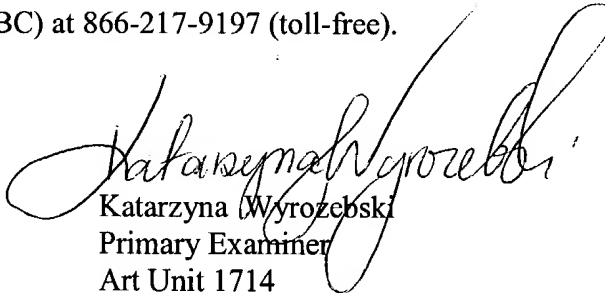
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particle size, as that disclosed in FUKUMOTO would provide adequately reinforced tire tread composition.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna Wyrozebski whose telephone number is (571) 272-1127. The examiner can normally be reached on Mon-Thurs 6:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Katarzyna Wyrozebski  
Primary Examiner  
Art Unit 1714

December 13, 2004